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ABSTRACT

This paper discusses a study on the efficacy of co-teaching; reviews related literature on the topic of co-teaching at all levels (noting benefits, drawbacks, and necessary elements); presents the results of an open-ended survey conducted with students who were team-taught; and presents the co-teachers' reflections on the experience. The research study involved 62 graduate students pursuing a Masters of Science degree in Education at the University of Tennessee, Knoxville during 1998. During the last meeting of each of several team-taught classes, students completed an instrument that asked: (1) how they felt about having two instructors team teaching their class, (2) how having two instructors affected their understanding of the content presented, (3) how having two instructors affected their understanding of work assigned, (4) how they felt about having two instructors to evaluate their work, and (5) other comments. Results indicated that students felt they greatly benefited from being team-taught and expressed a positive reaction to the experience. Generally, students felt that having two instructors enhanced the evaluation process, though some were confused over the evaluation of their work in this situation. (Contains 28 references.) (SM)

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Are Two Instructors Better Than One?: Planning, Teaching and Evaluating à Deux

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Are Two Instructors Better Than One?: Planning, Teaching and Evaluating à Deux

> . . . for all but inveterate lone wolves the
> creative energies released when two minds
> collaborate on a joint project
> often far exceed those that either of the
> participants would have been capable of
> when working alone.
> (Woodward, 1990, p. 16)

Introduction

Telemachus sat at the foot of Mentor. Young Alexander the Great listened to Aristotle. The youth of Athens were supposedly being led astray by the teachings of Socrates, and Helen Keller learned how to function in a hearing and seeing world because of Ann Sullivan's patient support and guidance. These instructors, all great teachers, whose students went on to change and challenge the world, had at least one quality in common. Although these teachers and pupils more than likely intellectually challenged each other and grew because of it, there is no doubt that the teachers, like most present-day teachers and others throughout history, engaged in a very solitary endeavor (Feiman-Nemser & Floden, 1986).

Teachers, although usually surrounded by people, mainly their students, often feel alone; administrators, peers, and other adults seldom walk into their classrooms. Other than the feedback they receive from their students, they engage in their activities with very little input. As Gabelnick, MacGregor, Matthews and Smith (1990) point out, (as cited in Leonard, 1996) "faculty lack opportunities to learn from one another" (p. 7); they are intellectually isolated from their peers. But, because of shifting school population demographics and the economy, this is changing for many teachers; co-teaching is becoming increasingly popular, both in the K-12 setting and on the secondary level. In fact, it is considered to be "one of the most celebrated contemporary practices" in the educational community (Gable, Arllen, & Cook, 1993) and one in which the authors of this paper were actively engaged throughout the past year.

During the 1997-1998 academic year, a tenured full professor shared a unique experience with one of her advanced doctoral students (presently a first-year assistant professor)—planning, implementing and evaluating instruction for four graduate (masters) level classes. These classes consisted of two second language methods classes, one action-research class and an educational topics/research class. After co-teaching the first class, the researchers decided to examine its impact on their students during their subsequent teaming in three other classes.

This paper will present the purpose and significance of the study examining the efficacy of co-teaching, a review of related literature on the topic, the results of an open-ended survey conducted with the students who were team-taught by the paper's authors, and the latter's reflections on the experience.

Purpose of the Study

The purpose of this study was to investigate the impact of team-teaching on students matriculating three classes

Significance of the Study

Due to a paucity in the literature on the topic of team or co-teaching on the post-secondary level, it is hoped that the results of this study may further contribute to the related research and possibly serve as a resource for those at the higher education level who would like to become team-teaching instructors.

Review of the Literature

This section of the paper will present a review of published literature on the topic of team-teaching having the following sections: Definition; History; Variations; Co-Teaching in Higher Education; Benefits and Disadvantages of Co-Teaching; Pitfalls; and Necessary Elements for Successful Co-Teaching.

Definition

What is today considered to be co-teaching has in the past been referred to by several different terms: team teaching, cooperative teaching, and collaborative teaching (Reinhiller, 1996). Trump and Miller (1973) define co-teaching "as an arrangement in which two or more teachers. .. . plan, instruct, and evaluate in one or more subject areas. . . using a variety of technical aids to teaching and learning" (p. 354). Co-teaching is not a matter of just putting two teachers together and expecting them to deliver content. Team teaching is a process, not an end result, one that involves teachers working together from the beginning planning stage to the end effort (Woodward, 1990).

History

During the 1950s, the American "baby boom," along with a high shortage of teachers, presented the education establishment with many challenges. In order to find a way to deliver an expanding body of information to an ever-growing student population via a small number of teachers within limited physical space, the Commission on Curriculum Planning and Development by the National Association of Secondary School Principals was established. Headed by J. Lloyd Trump, the Commission submitted "A Proposal Designed to Demonstrate How Improved Teacher-Utilization Can Help to Solve the Problem of Teacher Shortage in the High Schools of the United States to the Fund for the Advancement of Education." The Commission received funding to develop and implement teaching techniques that would address the problems facing the nation's schools. Team teaching, one of the techniques proposed by the Commission, was then implemented and investigated by over 100 schools across the nation (Trump & Baynham, 1961).

With the emphasis put upon it by Trump's Commission and its inclusion within the popular open school movement, the idea of co-teaching gained momentum. Although the impetus for Trump's Commission was not the need for inclusion of special education students into general

education classes, co-teaching became more popular, especially in the elementary grades (Friend, Reising, & Cook, 1993), with the advent of laws mandating a better educational experience for children with disabilities. The call during the 1980s for mainstreaming students put great stress upon regular or general education teachers who were not trained to address the problems of special needs children. This meant that special education teachers had to make themselves available to general education teachers; a new kind of dialogue had to develop between the special and general education classroom teacher; thus the revitalized interest in co-teaching (Reinhiller, 1996).

Variations

Just as there are several words for describing co-teaching, there are also several variations or ways to co-teach. The simplest form of co-teaching is to have two teachers take turns delivering information to the class. After the presentation, the students may be divided into groups, with each teacher working directly with one group each (Woodward, 1990). During one teacher's presentation, the other may be monitoring the work of students throughout the class, what Vaughn, Schumm and Arguelles (1996) call "grazing." Another popular form of co-teaching is to again have one teacher in front of the class presenting information, while the other teacher, instead of visiting students, stands at the back of the room or sits, occupied with some other activity; this type of teaching Vaughn et al. (1991) label "tag-teaching." But, as Woodward suggests, "if two teachers are to be present in the classroom, there must be ways of using that fact to the full, rather than have them just take turns at teaching" (p. 16).

Vaughn et al. (1996) have identified five alternative models for co-teaching

- One Group - One Lead Teacher, One Teacher "Teaching on Purpose"
- Two Groups: Two Teachers Teach Same Content
- Two Groups: One Teacher Re-teaches, One Teacher Teaches Alternative Information
- Multiple Groups: Two Teachers Monitor/Teach; Content May Vary
- One Group: Two Teachers Teach Same Content (pp. 4-7)

The above models call for active participation from both teachers at all times. The expertise of one teacher is not wasted while the other teacher presents a lesson.

Co-Teaching in Higher Education

Co-teaching has gained most of its recent popularity in this country due to the need to provide the best possible learning experience for children with special needs. The very fact that co-teaching is playing such an important role in the lives of children with disabilities and challenges means that co-teaching by extension, must also become a part of teaching in colleges and universities in order for K-12 pre-service teachers to have models for when they become teachers themselves. Although much of the literature's emphasis is on co-teaching within the special education arena, pre-service teachers in this field are not the only students who stand to benefit from co-teaching within colleges and universities.

Many college students attend classes and do not necessarily see the connection between any

of their courses. They construct knowledge that is fragmented and atomized. Since their professors may not necessarily make curricular connections for them, they have to make them themselves, and unfortunately, some never do. They continue to attend classes, never seeing the association between the facts and concepts being presented in one class with the knowledge gained from another, seemingly unrelated class (McDaniel & Colarulli, 1977). Co-teaching, especially with collaboration team members from disparate disciplines, can help students bridge this gap. But, unfortunately, co-teaching is not always possible because it is not necessarily cost effective. McDaniel and Colarulli, though, offer the " 'dispersed team model' to maximize quality through team teaching and collaboration in a learning community while controlling costs by maintaining the existing faculty load and faculty-student ratio" (p. 31). Within the framework of this model, students meet in small groups with their respective classmates and instructors, but at least once a week, they also meet with their other professors and those professors' students. Instructors collaborate as to what they will present in class, yet they can be independent for part of their class sessions (McDaniel & Colarulli, 1997). This model of team or co-teaching provides students with an opportunity to learn material in an integrated way while not being financially burdensome for the post-secondary institution in which it occurs.

Benefits and Disadvantages of Co-Teaching

Benefits for students

Although co-teaching is certainly not a panacea for all of the problems facing teachers and their students, several researchers have observed that there are several benefits for both teachers and students at the both the K-12 and college/university levels. According to Friend, Reisling and Cook (1993), "Teachers report that students in their co-taught classes perceive that someone is always available to assist them and that everyone receives special help" (p. 10). Research conducted by Pugach and Wesson (1995) conc rs with this finding. For students with disabilities who are indeed in need of special help and who may themselves discern that need, such a perception may go a long way to setting the right stage or atmosphere conducive to learning. This advantage, although attributed to a K-12 setting, does not necessarily have to be limited to that arena.

Co-teaching provides students with an opportunity to observe teachers with different or opposing views, professionals with diverse perspectives (Collins, Hemmeter, Schuster, & Stevens 1996; Reinhiller, 1996; Wheeler & Mallory, 1996;), although Winn and Messenheimer-Young (1995) suggest that there may be times when students do not stand to profit from multiple viewpoints. Schaible and Robinson (1995) report that their students saw "effects on (a) the classroom environment for collaborative work (particularly in areas of conflict resolution, respect for differences, and self-management) and (b) their perceptions of the kinds of working relationships possible between men and women in the workplace" (p. 11).

Instructors do not always have the same philosophical orientations. However, by working together and allowing students to see how professionals with strong disagreements can negotiate and work together, students are provided with a model for positive behavior (Schaible & Robinson, 1995). They may use what they see as a blueprint for their own future behavior when they collaborate with other teachers and professionals. The benefits, though, are not to be found only in the future; if students see respect as an integral part of the instructors' relationship,

this respect may translate to how the students treat each other in class (Schaible & Robinson, 1995). In fact, Morganti and Buckalew (1991) witnessed, because of an "atmosphere of open interchange. . .. , high-quality student participation in class" (p. 196).

Co-teaching also exposes students to a broader content knowledge base (Preskill, 1995). Such was the case when Lenn and Hatch (1992) co-taught a kindergarten methods course. Because Lenn was a kindergarten teacher and Hatch a professor, students were able to study and learn with instructors who came from very different backgrounds and perspectives; via these perspectives, students were able to "better see relationships between theory and practice" (Lenn & Hatch,1992, p. 10). They came to a greater appreciation of theory because they were able to see the connection between practice and theory from the perspective of two instructors grounded in those backgrounds.

Teaching in tandem at the college/university level provides pre-service regular and special education teachers the opportunity to view the kind of teaching that is going to be required of them at some point in their careers. In other words, college/university instructors have the opportunity to as a team, model behavior (Preskill, 1995).

Benefits for Teachers

According to Lenn and Hatch (1992), co-teaching forced them to examine their "assumptions about theory and practice and what makes for sound teacher education practice" (p. 12). Morganti and Buckalew (1991) meet after each class to discuss and critique their teaching; Winn and Messenheimmer-Young contemplate and discuss their teaching in order to understand its intricacy; thus, co-teaching can lead to greater reflection on the part of the co-teachers. As Bowles (1994) points out, "the synergy of the shared teaching arrangement results in self-examination and improved teaching" (p. 13).

Co-teachers also have the opportunity to enhance their teaching ability, receive intellectual stimulation, and enjoy "closer connections that result from an increased sense of community within the college or university" (Reinhiller, 1996). Not only do students learn different perspectives and content knowledge, so do the co-teachers as well. The latter augment their knowledge base and learn new strategies from one another. Teachers may find themselves in situations where they have to discuss frustrating issues, such as grading, as were the teachers in Kain's (1997) study. Bringing such issues into the open may help teachers gain insights into the evaluation process by the very act of having to discuss them.

Hatcher, Hinton, and Swartz (1995) view co-teaching as an opportunity to socialize new faculty "and thus affect the culture and climate of the organization" (p. 33). In this way, co-teaching becomes a mentoring tool or technique, with new faculty learning about their institution's culture, thus becoming politically astute (Hatcher & Hinton, 1996). Although mentoring was not the only reason for co-teaching a class together, Morganti and Buckalew (1991) also regard co-teaching as a good vehicle for mentoring. The above collaborative efforts refer to faculty, but co-teaching's mentoring advantage can be made available to graduate students and teaching assistants as well.

Working with an experienced professor may help some graduate students who were former K-12 educations, make the transition to the higher education arena; it also gives those graduate students with no previous teaching backgrounds invaluable experience. Co-teaching a class with a senior faculty member provides these students with an opportunity to not only get teaching experience in a controlled/mentored environment, but to also learn more about the taking an active instructional role in a post-secondary institution.

Disadvantages

Although co-teaching has become extremely popular, it must be carefully implemented. Teachers should not be paired to work together in order to "cover" for the inadequacies of one of the parties (Howe & Miramontes, 1992). A successful team must be composed of confident, professional, competent participants. A teacher who does not have one or any of these qualities will not necessarily improve by merely being paired to work with someone else. He or she may, in fact, become threatened by the competencies of the other teacher and his or her own lack of them. This problem, of course, may not appear if co-teaching is being implemented as a mentoring device for graduate students or teaching assistants since it may be assumed that the senior faculty member is the one with the expertise in his or her field and the graduate student is being paired with such a professional in order to gain experience and knowledge.

In order for co-teaching to be efficacious, not only must the teachers involved be competent, but they must resolve beforehand to be equals in the classroom; if this does not occur, one of the teachers may take on the role of a paraprofessional, providing for an obvious loss of expertise and knowledge (Friend, Reising, & Cook, 1993). This may occur even at the college/university level, as testified by Watson (1996), a graduate student, who collaborated with a full professor in a writing-across-the-curriculum project. Although Watson still enthusiastically endorses co-teaching, she feels there was too much of a difference in ranks between herself and her full professor co-teacher. This situation may become unpleasant for the co- teachers and counterproductive to the learning process; students may perceive "a lack of cohesion" in the course and delivery (Hatcher, 1995).

There is also the problem of students wondering who is in charge and being "concerned about having to "please" more than one instructor" (Hatcher, 1995, p. 28) Some students may feel uneasy because they do not know what to expect (Robinson & Schaible, 1995), since being students in a co-taught class may be something completely new to them. Further adding to student confusion may be the problem of grading. As Winn and Messenheimer-Young (1995) explain, although "explicit, well-articulated criteria for grading" may exist, "Even with these criteria, there still can be inconsistency in grading with two instructors" (p. 228).

The old adage of "more hands make the work lighter" may not necessarily apply to co-teaching and the time involved in preparation. Hatcher (1995) saw an increase in class preparation time due to needed early planning and on-going meetings used to facilitate necessary revisions. In fact, Winn and Messenheimer-Young suggest that co-teaching is not a time saver, and that "Explicit discussions about teaching decisions are essential and demand time" (p. 228).

Pitfalls

Although co-teaching can offer many benefits to both students and teachers, not all co-teaching ventures are a sounding success. According to Watson (1996), when she co-taught with another professor, both instructors were not focused on the same issues, which meant that they perceived the importance of their two subject areas differently; also, there was the usual stress experienced by faculty who are put into a situation where they are expected to perform like experts.

Co-teaching may present teachers with a host of problems. Some may be confronted with difficult ethical decisions. For instance, what if they find themselves working with someone who is aggressive, unethical and/or prejudiced? What if these actions are manifest in the classroom? Who do they turn to, knowing that they are legally bound to protect the rights of their students, yet knowing they must continue working with the offending individual? (Gable et al., 1993, found in Reinhiller, 1996.) This ethical dilemma is further compounded by the issue of confidentiality; teachers expect to be able to share their ideas and feelings with a collaborator. But, as Gable, et al. point out, "Asking teachers to engage in confidential dialogue with the risk of public disclosure presents . . . an ethical dilemma" (p. 34). A teacher may find her/himself working with someone who is not very enthusiastic about co-teaching. They may feel threatened, knowing their foibles will be witnessed by another professional. The other co-teacher may have quite a different philosophy about co-teaching, teaching, or even work itself. Some teachers are concerned because they feel their collaboration efforts "might replace other service delivery models that they believe. . . [are] more appropriate for some students," (Reinhiller,1996, p. 41) such as one-to-one therapy for special articulation problems. (Nowacek, 1992; Reinhiller, 1996).

Necessary Elements for Successful Co-Teaching

Co-teaching can be of great benefit for both the instructors and the students, but in order for it to be a successful venture, several issues must be addressed. Adams and Cessna (1993) suggest the following requirements be met:

- teachers should share responsibility with what happens in the classroom.
- decisions should be made together.
- the easy and tough roles are shared.
- the work load is shared;
- teachers learn the dance- the ability to both lead and follow in the classroom with the graceful and instinctive moves found in successful dancers.

Co-teachers should not expect different important decisions to just fall into place or work themselves out. Bodhe and Harris (1996) discussed "behavior, grading, requirements, and objectives" before, not after they began co-teaching (p. 29). This was done in order to provide students with guidelines. They were able to articulate their positions on those issues, issues that could have become explosive if not attended to early in the process of working together. Walther-Thomas, Bryant, and Land (1996) suggest that, "co-teachers must become familiar with each other's professional skills, including their instructional strengths, weaknesses, interests, and attitudes" (p. 260). They should also plan to meet weekly in order to co-plan for "content goals, learner needs, and effective instructional delivery" (p. 260).

Conclusion

According to review of the published literature on the topic, although co-teaching is enjoying much popularity today because of the need to provide quality education for K-12 children with disabilities, it also provides many benefits for teachers and students, in both the K-12 setting and in institutions of higher learning.

Methodology

This section of the paper will present the subjects who participated in the research study, the instrument used and an analysis of the collected data.

Subjects

The subjects in this study consisted of 62 graduate students pursuing a Masters of Science degree in Education who were matriculating three graduate classes (LCHE 578, ESL Methods; EDU 591 Clinical Studies; and EDU 517 Trends and Issues in Education) at The University of Tennessee, Knoxville during the Spring 1998 semester and 1998 Mini-Term.

Instrument

The instrument for the research study was developed by the authors, was administered during the last meeting of each of the team-taught classes, and consisted of five open-ended questions asking the following:

1. How did you feel about having two instructors team teaching in this class?
2. How did having two instructors affect your understanding of the content presented?
3. How did having two instructors affect your understanding of work assigned?
4. How did you feel about having two instructors evaluate your work? (This included grading and giving feedback.)
5. Other comments:

Data Analysis

The data were analyzed qualitatively to identify general themes and commonalities. Since there did not appear to be a significant difference in the responses among the three classes of students participating in the study, results of the analysis will be presented accordingly.

In general, the students felt that they greatly benefitted from being team-taught. The following comments are indicative of most students' comments on the issue.

> I really enjoyed having both instructors in the room for several reasons. First, we had the skills and experiences of 2 teachers from diverse backgrounds. If I had a question, its was answered very quickly because there were 2 instructors available.

> If I questioned a grade, I could present the problem to the other teacher for her feedback. It presents a form of 'checks and balances' and provides the ultimate opportunity for fairness.
>
> I think that I learned so much over the past three [mini-term] weeks. It was nice to have 2 teachers' experiences and wisdom in class along with the 30 other perspectives that were offered by the students.
>
> I believe it [having two instructors] increases my understanding & allows me to broaden my own point of view. I am more able to see 'the big picture." They [the instructors] each have their strengths & are able to clearly express their ideas.

Many students addressed the idea of evident collaboration between the two co-teachers and expressed a positive reaction to the experience.

> Two instructors are great—if they collaborate well together, are both qualified, and are in sync with each other. You two work great together—it has enhanced my learning having twice the help, twice the instruction, and twice the support.
>
> Both of you work well together! I think that team teaching is great!
>
> This has been a positive experience for me—it's the first time I've been exposed to this kind of teaching. The two instructors complemented each other well– each served to clarify the other's point.
> Good class. It's a shame the next bunch of students won't be able to experience your team efforts. However, you both will mentor another great one I'm sure.
>
> My exposure to the team-teaching approach in this class was very positive. I believe that it, overall, enhanced my learning in a very positive way.

For many students, this was their first experience of having instructors from very diverse backgrounds.

> I felt that...having two instructors really enforced the information we were learning. It think that having instructors from different backgrounds (ethnic) really benefitted us by providing different perspectives.
>
> It gives us two ideas and types of feedback...

There were a few students who had been previously team-taught and who were not pleased with the opportunity.

I enjoyed having two instructors for this class. My ...class I had in the spring had two instructors and they wasted our time, and were very disorganized. I enjoyed you both. Thanks for the organization!

This is one of the FEW times I have really seen team-teaching really happening and I've only seen it this successful once.

Generally, students felt that having two instructors enhanced the evaluation process.

It was good to have two instructors in that you had the option to go to either one for clarification of work assigned if you felt you needed to.

The grading was very fair by both instructors. Feedback was helpful.

I appreciated the different perspectives [of evaluation]. I do not think consistency in grading was a problem.

There were some students, however, who appeared to be confused concerning the evaluation of their work.

I sometimes didn't know whose comments I was reading.

At first a little confusing—then [the grading] became clearer.

O.K.—A little uneasy about the grading at first because [I wasn't] sure about two sets of expectations.

Until recently, I felt like each project was graded by one person, but I now understand differently. It [having two instructors grade] didn't bother me actually.

I was not sure who made the evaluation & therefore, was not sure who to approach with feedback.

I found that there may be slight differences in their evaluation method, but I attributed that to personal preferences.

...a few discrepancies in grading—but overall—good.

And, there were students who genuinely expressed a positive attitude to having two instructors evaluate their work.

The feedback was great! And I felt that the grading was more fair.

Although frustrating at times, I like how the instructors expect our papers to (essentially) be written well enough for publication!

I like the speed in which we got our assignments returned.

Our work [got] back fast!

Discussion

Co-teaching allows students to learn from two or more instructors who have different perspectives about the same topic; they have the opportunity to see certain behaviors modeled that would not be available to them in a solo-taught class. Co-teaching can also help teachers unleash creative energy that is usually tapped into only when working in conjunction with a fellow professional. In addition, teaching à deux has the potential to deliver a quality of instruction, tapping two different perspectives and teaching styles which would not be possible with just one teacher.

The authors of this research paper agree that they benefitted greatly from this co-teaching experience and are now much stronger teachers for having been engaged in the process. It should be emphasized that the teaming of an experienced professor with a junior professor-to-be has an additional benefit in that senior faculty have the opportunity to pass on their knowledge and expertise by working closely with a future faculty member - training, guiding, mentoring him/her, in much the same way as did Mentor with Telemachus and Aristotle with Alexander the Great; this occurred while at the same time not having to lead a professional solitary existence.

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